



# *X-Plain™*

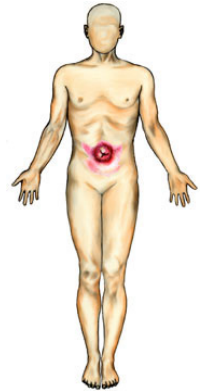
## *Inguinal Hernia*

### **Reference Summary**

Hernias are common conditions that affect men and women of all ages. Your doctor may recommend a hernia operation.

The decision whether or not to have this surgery is also yours.

This reference summary will review the benefits and risks of this surgery.



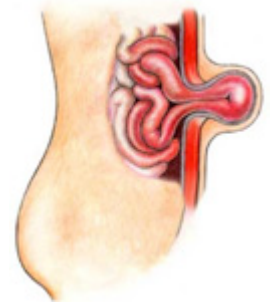
### **Anatomy**

The stomach and intestines help digest and absorb the food we eat. They are inside the abdomen, covered and protected by three layers.

The first one is a thin membrane called the “peritoneum.” The second is a wall made of many muscles. The third and last layer is the skin.

### **Symptoms And Their Causes**

If the muscles of the abdomen become weak, the intestines and the first covering, the peritoneum, can push through the weak spot. This feels like a bulge under the skin. This is called a hernia. There are three types of hernias: umbilical, groin, and incisional. This summary explains the treatment of groin hernias.



A groin, or “inguinal,” hernia occurs because of a defect or weakness in the lower part of the abdominal muscles. The weakness in the muscles could be the result of lifting heavy objects. It could also result from gradual weakening of the muscles from continuous stress.

The hernia can feel like a bulge in the groin. In males, it can show up as a swelling or enlargement of the scrotum.

Hernias can be dangerous because some of the structures inside the abdomen, such as the intestines, can get stuck or twisted inside the hernia and cut off their own blood supply.

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This is known as a “strangulated hernia.” This type of hernia could lead to the death of that part of the intestines and would require a more complex and riskier operation.

In addition, hernias tend to get larger with time. Surgery is the only definite way to correct the problem.

## **Surgical Procedure**

There are two ways to repair groin hernias. One method, called “open hernia repair” uses a skin incision over the area of the hernia.

A hernia could, alternatively, be repaired with scopes and smaller incisions. This is known as “laparoscopic hernia repair.” The benefits of the laparoscopic operation are a faster recovery period and a shorter hospital stay.

Unfortunately, not everybody is a candidate for this operation. For example, patients with previous abdominal operations or abdominal adhesions are generally not candidates for this procedure. Sometimes the surgeon can start a laparoscopic operation and end up having to switch to an open surgery. This is usually done if the surgeon realizes that the open surgery is safer for a specific patient. This, however, rarely happens.

The open surgery could be performed under local, epidural, spinal, or general anesthesia. The laparoscopic surgery is always done under general anesthesia. Your doctor and anesthesiologist will discuss with you the best-suited anesthesia options.

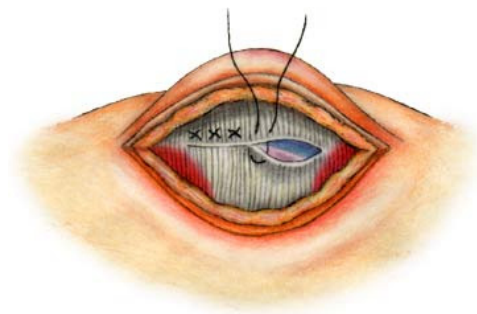
In the open surgery, the surgeon makes an incision in the area of the hernia. The intestines and peritoneum are then pushed back into the abdomen.

Next, the muscle wall is reinforced with stitches that hold it together. Your surgeon may decide to place a synthetic mesh to cover the defect.

The surgeon then closes the incision.

With the laparoscopic operation, the abdominal cavity is filled with a special gas.

Multiple small incisions are made and scopes are inserted in the abdominal cavity. The intestines and peritoneum are then pushed back into the abdomen. A mesh is placed to correct the defect.



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## Risks And Complications

This surgery is very safe. There are, however, several possible risks and complications. These are unlikely but possible. You need to know about them just in case they happen. By being informed, you may be able to help your doctor detect complications early.

The risks and complications include those related to anesthesia and those related to any type of surgery.

Risks of general anesthesia include nausea, vomiting, urinary retention, cut lips, chipped teeth, sore throat, and headache. More serious risks of general anesthesia include heart attacks, strokes, and pneumonia.

Your anesthesiologist will discuss these risks with you and ask you if you are allergic to certain medications.

Blood clots in the legs can occur due to inactivity during and after the surgery. These usually show up a few days after surgery. They cause the leg to swell and hurt.

Blood clots can become dislodged from the leg and go to the lungs where they will cause shortness of breath, chest pain and possibly death. It is extremely important to let your doctors know if any of these symptoms occur.

Sometimes the shortness of breath can happen without warning.

Getting out of bed shortly after surgery may help decrease the risk of blood clots in the legs.

Some of the risks are seen in any type of surgery. These include:

- Infection. Infections can involve the abdominal incision. Treating infections may require antibiotics and possibly surgery to drain the infection.
- Bleeding, either during or after the operation. It might cause bluish discoloration of the skin.
- Skin scars.

Other risks and complications are related specifically to this surgery. These, again, are very rare. However, it is important to know about them.

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Structures in the abdomen could be damaged. Such problems can include the following:

- The intestines could be perforated.
- Internal female organs such as the uterus and ovaries could be affected.
- Kidneys, the urinary bladder, and the connecting tubes could be affected.

Damage to these structures could lead to permanent damage and the necessity to proceed with other operations. These, again, are very rare. In extremely rare cases, death may result from these complications.

If you had a mesh put in during surgery and develop an infection you might need to have the mesh removed to help clear the infection.

In men special tubes called “vas” which go from the testicle on the same side of the hernia to the penis could be injured. If these tubes are injured, it could cause sterility, or inability to have children, if the other testicle is not functioning. Repairing such an injury may require another operation, which may not be successful.

In groin hernias, nerves and blood vessels going to the leg could be injured, leading to some bleeding or decreased sensation on the inside of the thigh, rarely leg weakness or partial paralysis may occur. This could be permanent.

Finally, the hernia could happen again or recur.

### **After The Surgery**

After the operation is done, the patient is transferred to the recovery room and then to a regular room. Most patients go home the same day of the surgery.

Some swelling around the incision and bluish discoloration is normal in groin hernias. This could involve the penis. If the pain or discoloration is very severe or if you are unable to urinate, you should let your doctor know. To prevent the hernia from recurring, no heavy lifting, bending, or twisting is allowed for a few weeks.



Depending on your condition, your doctor will help you decide when you will go back to work and under what restrictions. Make sure to contact your doctor in case of any new symptoms, such as fever, severe abdominal pain, weakness, swelling, or infection.

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## Summary

Hernias are a common condition that affects people of all ages. If left untreated, they can cause severe pain and serious complications. Surgery is usually recommended to treat hernias.

Hernia surgery is very safe and effective. Risks and complications are very rare. Knowing about them will help you detect and treat them early.

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